

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-005491**Date Inspected:** 23-Feb-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai China

|                                    |              |           |            |
|------------------------------------|--------------|-----------|------------|
| <b>CWI Name:</b>                   | Yu Dong Ping |           |            |
| <b>Inspected CWI report:</b>       | <b>Yes</b>   | <b>No</b> | <b>N/A</b> |
| <b>Electrode to specification:</b> | <b>Yes</b>   | <b>No</b> | <b>N/A</b> |
| <b>Qualified Welders:</b>          | <b>Yes</b>   | <b>No</b> | <b>N/A</b> |
| <b>Approved Drawings:</b>          | <b>Yes</b>   | <b>No</b> | <b>N/A</b> |

|                                  |            |           |            |
|----------------------------------|------------|-----------|------------|
| <b>CWI Present:</b>              | <b>Yes</b> | <b>No</b> |            |
| <b>Rod Oven in Use:</b>          | <b>Yes</b> | <b>No</b> | <b>N/A</b> |
| <b>Weld Procedures Followed:</b> | <b>Yes</b> | <b>No</b> | <b>N/A</b> |
| <b>Verified Joint Fit-up:</b>    | <b>Yes</b> | <b>No</b> | <b>N/A</b> |
| <b>Approved WPS:</b>             | <b>Yes</b> | <b>No</b> | <b>N/A</b> |
| <b>Delayed / Cancelled:</b>      | <b>Yes</b> | <b>No</b> | <b>N/A</b> |

**Bridge No:** 34-0006**Component:** OBG cross beams and suspension brackets**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG bay 19

This QA observed ZPMC qualified welding personnel identified as Mr. Chen Zhoushan (062750) and Mr. Wang Yong (062807) perform FCAW welding on suspension bracket identified as SB004-012. ZPMC QC identified as Mr. Xu Tao was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

This QA observed ZPMC qualified welding personnel identified as Mr. Zhang Chao (062739) and Mr. Xie Biwu perform FCAW welding on weld joint identified as FB209-1-002-084 and 050. ZPMC QC identified as Mr. Xu Tao was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-B-U2-F.

This QA observed ZPMC qualified welding personnel identified as Mr. Han Zejiao (062808) and Mr. Fei Xiang (062751) perform FCAW welding on suspension bracket identified as SB002-012. ZPMC QC identified as Mr. Xu Tao was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

This QA observed ZPMC qualified welding personnel identified as Mr. Xu Aihua (062816) perform SAW welding on weld joints identified as BP-026-002-002, BP027-001-001 and BP025-009-001. ZPMC QC CWI

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identified as Mr. Yu Dong Ping was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-L2c-S-2.

This QA observed ZPMC qualified welding personnel identified as Mr. Wang Yulong (062817) perform SAW welding on weld joint identified as BP-025-003-003. ZPMC QC CWI identified as Mr. Yu Dong Ping was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-L2c-S-2.

This QA observed ZPMC qualified welding personnel identified as Mr. Liu Changqing (062755) perform FCAW (root) welding on weld joint identified as BP-028-001-001. ZPMC QC CWI identified as Mr. Yu Dong Ping was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-B-U2-F.

This QA observed ZPMC personnel tack welding various cross beam bottom panel splice joints and suspension brackets. ZPMC QC CWI identified as Mr. Yu Dong Ping was present to monitor the tack welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with the applicable WPS.

This QA observed ZPMC personnel flame straightening suspension bracket flange distorted by the welding process. The flame straightening process appeared to be in general compliance with ZPMC flame straightening procedure outlined in the contractors WQCP section 11.

OBG outside assembly segment (3AW, 3BW and 5AE)

No work being performed on these segments while QA was present.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Patrick Lowry (858)-344-2712, who represents the Office of Structural Materials

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for your project.

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| <b>Inspected By:</b> | Hall,Steven | Quality Assurance Inspector |
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| <b>Reviewed By:</b> | Carreon,Albert | QA Reviewer |
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